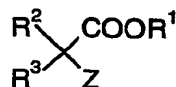


Claims:

1. A process for the separation of palladium from solvent-free at room temperature solid crude reaction mixtures comprising aryl acetic acids of the general formula

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wherein

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Z means phenyl, naphth-2-yl, 9H-fluoren-2-yl, substituted carbazol-2-yl, benzoxazol-5-yl, either of which can be substituted with H, C₁-C₈-alkyl optionally cyclic and optionally substituted with -F or -Cl, C₆-C₁₀-aryl optionally substituted with F or Cl, OR⁴, COR⁵, -F, -Cl; optionally substituted pyrrolyl or dehydropyrrolyl or 1-oxo-1,3-dehydro-isoindol-2-yl;

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R¹ means H or C₁-C₄-alkyl; R², R³, R⁴, R⁵ mean independently of each other H, C₁-C₈ alkyl, C₆-C₁₀-aryl optionally substituted with -F or -Cl, or thiophenyl;

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which crude mixture is obtained by palladium catalyzed carbonylation, by adsorption of the palladium on solid adsorbents, characterized in that the adsorption is carried out in the absence of a reducing agent for palladium and at a temperature, where the crude reaction mixture is molten.

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2. A process as claimed in claim 1, wherein said crude reaction mixtures comprise a compound selected from the group consisting of ibuprofen, naproxen, ketoprofen, flurbiprofen, indoprofen, suprofen, hexaprofen, piroprofen, fenoprofen, cicloprofen, mexoprofen, benoxaprofen and carprofen).

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3. A process as claimed in claim 1, wherein said crude reaction mixtures comprise ibuprofen or naproxen.
4. A process as claimed in claim 1, wherein the solid adsorbent is selected from the group consisting of activated carbon, optionally functionalized silica gel, aluminum oxide, infusorial earth, magnesium oxide, ion-exchange resin, neutral solid adsorbent, zeolite and a combination of two or more of such solid adsorbents.

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5. A process as claimed in claim 1, wherein the adsorbent is directly added to the crude reaction mixture, stirred and then separated by filtration.
6. A process as claimed in claim 1, wherein the adsorption is conducted at a temperature in the range of 40°C to 180°C.

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7. A process as claimed in claim 1, wherein the said temperature is in the range of 40°C to 150°C.
- 5 8. A process as claimed in claim 1, wherein the temperature is in the range of 60°C to 120°C.
9. A process as claimed in claim 1, wherein an activated carbon with an average particle-size < 150 µm for 80% of the particles is used as adsorbent.
- 10 10. A process as claimed in claim 9, wherein the activated carbon shows an average particle-size < 60 µm for 80% of the particles.
11. A process as claimed in claim 1, wherein the ion-exchange resin is a basic ion-exchange resin
- 15 12. A process as claimed in claim 11, wherein the ion-exchange resin is a strong basic ion-exchange resin.
13. A process as claimed in claim 1, wherein the solid adsorbent is a functionalized silica gel.
- 20 14. A process as claimed in claim 13, wherein the said functionalized silica gel is functionalized with phosphine groups.
- 25 15. A process as claimed in claim 14, wherein the said functionalized silica gel is preferably a silica gel functionalized with diphenyl phosphine groups.